

Please complete form. Handwritten forms will NOT be accepted. Print form, sign and mail to:

KANSAS STATE BOARD OF TECHNICAL PROFESSIONS

900 SW Jackson Street, Suite 507, Topeka, KS 66612

www.ksbtp.ks.gov 785-296-3053

FUNDAMENTALS OF SURVEYING EXAM APPLICATION

INSTRUCTIONS: Applicants should read all statutes, rules and regulations for details regarding requirements available on the KSBTP web page.

- This application is to determine eligibility for the Fundamentals of Surveying exam and Certification as an Intern Surveyor. There is no fee payable to the Board. **DO NOT** register with NCEES until you receive your approval letter from KSBTP.
- Exam Results: Exam results are reported to **HOME MAILING ADDRESS** provided in this application. Check the KSBTP web site for the date on which exam scores were mailed.
- Each applicant shall meet one of the following requirements for admission before taking the examination. (1) Graduation from an accredited surveying curriculum, as defined in K.A.R. 66-9-5(b), (c), and (d); (2) successful completion of the surveying curriculum specified in K.A.R. 66-9-5(e); **or** (3) verification of a combination of education and experience of a character satisfactory to the board. See TABLE OF REQUIREMENTS FOR SURVEYOR EXAMINATION on Page 6.

A COMPLETE APPLICATION WILL INCLUDE THE FOLLOWING:

- 1. APPLICATION FORM** – Print completed form, sign, date and send to KSBTP. File will NOT be considered complete for Board review until all required documentation has been received. Pending applications are kept on file for one year.
- 2. EDUCATION** – Applicants should carefully review the Table of Requirements on Page 6. Applicants who are graduates of an accredited 4-year or an accredited 2-year surveying curriculum or have completed the surveying curriculum specified in K.A.R. 66-9-5(e) must complete Page 2 of this application and provide official transcripts.
- 3. TRANSCRIPTS** – Official transcripts are required for all educational credit claimed. Send an ‘official’ transcript or have the school send a transcript directly to KSBTP. Non-US degrees must be evaluated by NCEES. See special instructions below.
- 4. SURVEYING EXPERIENCE** – Applicants applying under K.A.R. 66-11-5(b)(3) must supply an experience record and references. Supply verification of only the minimum required number of years of experience, even if more experience is acquired. In order to receive experience credit, any surveying work experience after May 1, 1988, must have been supervised by a licensed surveyor.
- 5. PROFESSIONAL REFERENCES** – Each experience engagement listed on the professional experience record must be verified by a supervisor. The number of references may be as few as one if you have had only one engagement with one supervisor. Complete the Classification of Tasks worksheet (if applicable) starting on Page 7. Professional Reference Forms must be returned directly to the board office from the reference. Relatives may not serve as references. The Reference Forms may be ‘handwritten’.
- 6. \$20 APPLICATION FEE**

HANDWRITTEN OR INCOMPLETE applications will be returned. **Applicant will be notified of Board action.** Keep a **copy** of this application for your records.

SPECIAL INSTRUCTIONS FOR APPLICANTS WITH DEGREES FROM OUTSIDE THE UNITED STATES: Any applicant with a surveying degree from outside the United States must have that degree evaluated before educational credit may be considered by the Board. See Table of Requirements on Page 6 for information regarding education requirements for Surveying and see K.A.R. 66-9-5 concerning Surveying curriculum approved by the board. Non-US degrees must be evaluated by NCEES.

NCEES CREDENTIALS EVALUATIONS ****Request a report be sent to KSBTP.**

Website: www.ncees.org

Phone: 1-800-250-3196 OR (864)-654-6824

NOTE: All questions regarding the evaluation of your degree should be directed to NCEES.

- The Board will make the final determination of the educational requirement per K.A.R. 66-9-5.
- Send degree materials as soon as possible as a thorough evaluation of educational credentials may take several months.

OFFICE USE ONLY:
 LICENSE NUMBER _____ FEE _____ DATE _____

KANSAS STATE BOARD OF TECHNICAL PROFESSIONS – FUNDAMENTALS OF SURVEYING EXAM

I. GENERAL INFORMATION

APPLICANT NAME: _____ Maiden Name: _____
 (First/Middle/Last)

Social Security #: _____ Date of Birth: _____ Send official mail to: Home Business

HOME MAILING ADDRESS: _____
 (Exam results mailed to this address.) (Address/City/State/Zip)

Business Name: _____

Business Mailing Address: _____

(City/State/Zip)

Phone Number: _____ Ext. _____ E-mail address: _____

II. EDUCATION: Official transcripts are: Enclosed School will send

Name and Location of Institution	Dates Attended	Date Graduated	Degree Received (i.e. BS Civil Engineering)

III. EXAM HISTORY: List all Fundamentals of Surveying NCEES exams taken. As per K.A.R. 66-8-6, “any applicant for a license . . . who fails an examination on the first attempt may take the examination two additional times . . .”

Type of Examination	Original State	Date of Exam	NCEES Exam (Yes/No)	PASS or FAIL	Certificate Number	Date Cert. Issued
Fund. of Surveying Exam						

IV. SIGNATURE: Have you ever been convicted of a felony? YES NO
 (If YES, please explain. Use separate sheet if necessary.)

I HEREBY CERTIFY THAT ALL STATEMENTS IN THIS APPLICATION ARE TRUE AND CORRECT.

SIGNATURE

DATE

**It is YOUR responsibility to keep a copy of this application.

KANSAS BOARD OF TECHNICAL PROFESSIONS**PROFESSIONAL EXPERIENCE RECORD FOR SURVEYING**

Applicants who have graduated from either an accredited 4-year engineering curriculum or a 4-year related science curriculum are required to have 2 years of surveying experience before applying to take the Fundamentals of Surveying Exam. This experience can be either "basic" or "progressive." List only the minimum required number of years of experience.

Any credit for experience must be verified by a supervisor. Surveying work performed after May 1, 1988, must be under the direct supervision of a licensed surveyor, per K.A.R. 66-10-12(a)(1)(B).

INSTRUCTIONS:

1. The letter (a) designates first experience engagement. Letter subsequent engagements consecutively with (b), (c), etc.
2. State the title of the position along with the name and address of employer. Surveying experience must be explained in detail giving specific examples. If employed by more than one employer, each is considered a separate engagement. Use a separate form for each engagement. Complete additional forms and print as needed. If surveying experience was interrupted by work in other fields, illness, military service, etc., complete the form titled "Non-Surveying Employment"(Page 4).
3. Enter the name of the supervisor who will verify each engagement. Send reference forms (Pages 11-12) and a copy of the experience record to each individual listed. Each surveying engagement must be verified to obtain credit. Supply one reference for each experience engagement.
4. Refer to the information regarding Survey Experience of a Character Satisfactory to the Board and Classification of Tasks for Progressive Surveying Experience (Pages 7-13), to determine how to categorize work experience. Enter the amount of time spent in (1) basic surveying and (2) progressive surveying. Use years/months, for example: 3 years, 4 months.

APPLICANT NAME: _____

Engagement: _____ Position(s) Held: _____

EMPLOYER NAME : _____

EMPLOYER ADDRESS: _____

SUPERVISOR NAME: _____ **SUPERVISOR LICENSE #:** _____

DATES (Month & Year): From _____ To _____

EXPERIENCE:

(1) Basic Survey Time: _____ (maximum 2 years)

(2) Progressive Survey Time: _____

**** TO REPORT ADDITIONAL EXPERIENCE, PRINT THIS FORM, CLEAR IT, AND ENTER NEXT ENGAGEMENT(S).**

NON-SURVEYING EMPLOYMENT/UNEMPLOYMENT**APPLICANT NAME:** _____

Engagement: _____ Position: _____

Dates (Month & Year): From _____ To _____

Engagement: _____ Position: _____

Dates (Month & Year): From _____ To _____

Engagement: _____ Position: _____

Dates (Month & Year): From _____ To _____

Engagement: _____ Position: _____

Dates (Month & Year): From _____ To _____

TOTAL NON-SURVEYING TIME: _____**REFERENCE SUMMARY FORM**

Please list the name and license number of the supervisor that will be verifying each engagement:

ENGAGEMENT (a,b,c, etc.)	NAME OF REFERENCE	PROFESSIONAL LICENSE NUMBER

NOTE: Supervisor must be licensed in order to receive credit for any experience after May 1, 1988.

SURVEY EXPERIENCE OF A CHARACTER SATISFACTORY TO THE BOARD

The Kansas Board has determined that a certain amount of surveying experience must consist of "Progressive" surveying experience. The following guidelines shall be used to assign credit for work experience:

Progressive surveying experience may include the following eight (8) elements of professional surveying: project management; research; measurements and locations; computations and analysis; legal principles and reconciliation; land planning and design; monumentation; and documentation and land information systems. These guidelines closely follow the NCEES guidelines which were developed from a comprehensive task analysis of work performed by licensed professional surveyors throughout the country. NOTE: It is not necessary to have experience in all eight (8) elements to qualify for the FS.

1. **PROJECT MANAGEMENT** – A surveyor should have a knowledge of: Prevailing professional standards, practices and ethics; being able to communicate with clients, contractors, government agencies, etc.; dealing with administrative problems concerning selection of appropriate control and necessary data for a project; estimating required time and materials; selecting safety standards and policies; determining what supervisory controls, priorities, interpersonal relations, record documentation and procedures to use; and managing drafting work, survey and computer use.
2. **RESEARCH** – A surveyor should have a knowledge of how and where to obtain information necessary to complete a project and the relevance of various information to a particular application, including: land records, land descriptions, soils and vegetation, rules of evidence, court decisions, regulations, riparian determinations, highway maps and plans, land title, real property acquisition, rights of way, workplans, standards, policies and procedures.
3. **MEASUREMENTS AND LOCATIONS** – A surveyor should have a knowledge of various measurement techniques and mathematics involved such as: title surveys, topographic surveys, plane and geodetic surveys, boundary determinations, taping, leveling, electronic distance measurement, horizontal and vertical control, direction, traverse, triangulation, trilateration, stadia, celestial observations and error balancing and reduction techniques; also have a knowledge of use and maintenance of surveying and related equipment such as: tape, transit, theodolite, electronic distance measuring (EDM) equipment, total stations, level, rods, compass, photogrammetric equipment, plumb bob, odometers, etc.; and be able to understand and conform with codes and standards.
4. **COMPUTATIONS AND ANALYSIS** – A surveyor should have a knowledge of: mathematics including algebra, trigonometry, geometry and statistics; computational techniques including computer application and usage associated with accuracy, traverse, triangulation, trilateration, differential and trigonometric leveling, angles and directions, geographic position, public land system, state plane coordinates, errors and adjustments, horizontal and vertical curves, photogrammetry, earthwork quantities, plane and geodetic surveys, area, volume, and construction layout; and analyzing data and evidence using computations, prevailing professional standards, judgment and legal standards, land titles, survey plats and parcel descriptions.
5. **LEGAL PRINCIPLES AND RECONCILIATION** – A surveyor should have knowledge of legal principles applicable to: real estate, surveying, mapping and contract law, resolution of conflicts through analyzing data and records, court decisions and land title, standards, policies and procedures, rules of evidence and land descriptions.
6. **LAND PLANNING AND DESIGN** – A surveyor should have a knowledge of: basic land planning (including lot and street layout), general requirements for land development, determine constraining factors which may limit development, earthwork quantities, required control, plans and maps, computations for design and layout, horizontal and vertical control, photogrammetric mapping, topographic surveys, boundary information, land ownership and planning and zoning.
7. **MONUMENTATION** – A surveyor should have a knowledge of: vertical and horizontal monumentation, types and priorities of existing monumentation, placement or replace of monuments, determination of validity of existing natural or manmade monumentation, lost or obliterated corners and monuments of record, the use of highway plans or survey plats for information on monumentation, construction layout and boundary determination.
8. **DOCUMENTATION AND LAND INFORMATION SYSTEMS** – A surveyor should have a knowledge of: maintaining records, preparing maps and plats, documenting field and record evidence, writing property descriptions, drafting techniques, standards and regulations. A surveyor should also have knowledge of: vertical and horizontal monumentation, types and priorities of existing monumentation, placement or replacement of monuments, determination of validity of existing natural or manmade monumentation, lost or obliterated corners and monuments of record, the use of highway plans or survey plats for information on monumentation, construction layout and boundary determination.

Basic surveying experience is considered by the Board to include surveying experience which is normally identified with engineering projects. This would include construction staking, curb and gutter projects, sanitary sewers, and design surveys for highways or bridges other than those that relate to right-of-way surveys.

TABLE OF REQUIREMENTS FOR SURVEYOR EXAMINATION

	Maximum Credit Allowed for Education in Years	Maximum Credit Allowed for "Basic" Surveying Experience In Years	Total Education & Experience Required for FS Exam	Maximum Credit Allowed for "Basic" Surveying Experience In Years	Minimum "Progressive" Surveying Experience Required In Years	Total Education & Experience Required for PS Exam
I. Graduate of accredited 4-year surveying curriculum K.A.R. 66-9-5(b)	4 66-10-10a(a)	-	4	-	4	8
II. Graduate of Board approved 2-year surveying curriculum K.A.R. 66-9-5(c)	2 66-10-10a(b)	-	2	2**	4	8
III. Completion of surveying curriculum specified in K.A.R. 66-9-5(e)	2 66-10-10a(b)	-	2	2**	4	8
IV. Graduate of accredited 4-year engineering curriculum K.A.R. 66-9-5(a)	2 66-10-10	2	4	-	4	8
V. Graduate of a 4-year related science curriculum* K.A.R. 66-9-5(d)	2 66-10-10b	2	4	-	4	8

*Related Science Curriculum - Degrees in subjects which are related to land surveying may include geology, math, chemistry and physics.

**The total number of years of experience must be 6. All six years could be in "progressive" surveying. The maximum "basic" experience allowed is 2 years, but there is no minimum requirement for "basic" surveying experience.

NOTE: All educational credit must be verified by transcripts. Transcripts may be sent with application forms, or may be forwarded to the board office by schools or colleges. It is the responsibility of the applicant to see that a transcript is furnished to the board.

This table is provided only as a guideline. All education and experience are evaluated by the board.

CLASSIFICATION OF TASKS FOR "PROGRESSIVE" SURVEYING EXPERIENCE

ENGAGEMENT EXPERIENCE

[illegible][illegible]

3. MEASUREMENTS AND LOCATIONS

- [illegible]

[illegible]

1. Compare researched records with field data.
2. Compute coordinate values.
3. Verify field notes for completeness and accuracy.
4. Analyze existing control.
5. Compute and review closures and adjust traverse.
6. Compute areas.
7. Prepare work sheets of surveys for final drafting&boundary determinations.
8. Adjust field measurements.
9. Analyze sources of error.

10. Adjust coordinates to appropriate datum.
11. Evaluate parol evidence.
12. Determine positional tolerances.
13. Compute volumes.
14. Compute astronomic azimuths.

1. Compare researched records with field data.
2. Identify boundary line discrepancies.
3. Reconcile records and field evidence.
4. Reconcile conflicting deed descriptions.
5. Determine location of easements.
6. Consider the priority of calls.
7. Identify field conditions for evidence of possession.
8. Advise clients regarding boundary uncertainties.
9. Determine potential adverse possession claims.
10. Apply Public Land Survey System principles.
11. Identify riparian boundaries.
12. Review documents for clients and/or attorneys.
13. Identify littoral boundaries.
14. Testify as an expert witness.

[illegible]

1. Design horizontal alignment for roads within a subdivision.
2. Determine easement constraints.
3. Determine subdivision development requirements.
4. Determine and prepare lot and street patterns for land division.
5. Design vertical alignment for roads within a subdivision.
6. Determine flood plain limits.

[illegible]

7. MONUMENTATION

- [illegible]

[illegible]

KANSAS STATE BOARD OF TECHNICAL PROFESSIONS
900 SW JACKSON, SUITE 507
TOPEKA KS 66612
785-296-3053 **www.ksbtp.ks.gov**

NOTICE OF REFERENCE REQUEST

APPLICANT INFORMATION: (To be completed by APPLICANT)

1. Applicant Name: _____
2. Date for form to reach KSBTP: _____

Reference Name: _____

Reference Address: _____

To the Reference: The applicant listed above has given your name as a supervisor or one who is acquainted with one or more experience engagements listed in the experience record form accompanying this reference form. This Board is required by law to obtain evidence of the technical ability of applicants for certification. Statements by responsible individuals with personal knowledge of the applicant's qualifications will be considered as evidence. Additional information may be attached. The Reference Form may be 'handwritten'. Please write legibly.

The Board would like to emphasize that evidence submitted on this form must not be perfunctory nor made for the mere purpose of aiding the applicant to be certified. The execution of this statement will be accepted by the Board as a deliberate act made with full knowledge of the responsibility to protect the public health, safety and welfare. It should be borne in mind that the applicant is not being considered for membership in an organization but for certification as an Intern Surveyor in Kansas.

Since the Board cannot process this application until receipt of this reference, a prompt reply will expedite the handling of the application. **Your professional seal is required on this form. If you have no seal, please send a copy of your license.**

THIS INFORMATION WILL BE TREATED IN THE STRICTEST CONFIDENCE.

The **REFERENCE FORM FOR EXPERIENCE VERIFICATION** (which should be enclosed with this Notice) is to be returned directly to the board office at:

KANSAS STATE BOARD OF TECHNICAL PROFESSIONS
900 SW JACKSON, SUITE 507
TOPEKA, KS 66612

Mary Leigh Dyck, KSBTP Executive Director

KANSAS STATE BOARD OF TECHNICAL PROFESSIONS**REFERENCE FORM (TO BE COMPLETED BY PROFESSIONAL REFERENCE)**

NOTE: One engagement per form.

APPLICANT NAME: _____**REFERENCE NAME:** _____**REFERENCE PHONE:** _____ **REFERENCE E-MAIL:** _____

1. Are you a licensed/registered professional engineer or professional surveyor? _____

LIST LICENSE NUMBER(S) AND STATE(S): _____

2. What time period did you know the applicant well? FROM _____ (mm/yy) TO _____ (mm/yy).

3. What was your job relationship? Supervisor____ Fellow Employee____ Other_____

4. Are you related to the applicant? _____

5. Please give in brief your opinion of the applicant's capabilities in surveying and any other comments.

6. Please read the enclosed experience record form. Indicate the engagement with which you are familiar and provide information.

a. Engagement being verified (a, b, c, etc. from applicant's experience record): _____

b. Your position and company name for engagement being verified: _____

c. Has applicant accurately described his/her participation in engagement? _____

d. Did applicant demonstrate work experience in the eight (8) required elements of "progressive" land surveying experience?

1. Project Management	Yes	No
2. Research	Yes	No
3. Measurements and Locations	Yes	No
4. Computations and Analysis	Yes	No
5. Legal Principles and Reconciliation	Yes	No
6. Land Planning and Design	Yes	No
7. Monumentation	Yes	No
8. Documentation & Land Information Systems	Yes	No

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS TRUE AND CORRECT._____
SIGNATURE_____
DATE

**Professional
Seal**